

Curriculum Vitae

Sang-Ah Chi

Ph.D Candidate
Department of Health Sciences and Technology
SAIHST (Samsung Advanced Institute for Health Sciences & Technology)
Sungkyunkwan University

Research Scientist
Research Institute for Future Medicine
Samsung Medical Center

[View Scopus Profile](#)

Cell phone: +82-10-4722-2196

Email: sangah.chi@sbri.co.kr or sszzgg91@gmail.com

EDUCATION

Ph.D Candidate 2018 - present	Department of Health Sciences and Technology Samsung Advanced Institute for Health Sciences & Technology Sungkyunkwan University, South Korea
MS-Ph.D Program 2015 - 2018	Department of Health Sciences and Technology Samsung Advanced Institute for Health Sciences & Technology Sungkyunkwan University, South Korea
B.S 2010-2014	Department of Applied Statistics Konkuk University, South Korea

EDUCATION - COURSES ATTENDED (SELECTED)

Statistics

2018	Advanced Statistical Simulation, Data Mining Methodology II
2017	Generalized Linear Models, Statistical Programming, Advanced Statistical Data Mining, Multivariate Data Analysis
2016	Survival Analysis, Statistical Inference
2015	Introductory Biostatistics
2013	Categorical Data Analysis (E), Multivariate Data Analysis (E), Nonparametric Statistics (E), Time Series Analysis, Bayesian Statistics (E), Statistical Seminar, Financial Statistics, Economic Statistics
2012	Mathematical Statistics I (E), Mathematical Statistics II (E), Regression Analysis, Design of Experiment, Exploratory Data Analysis, Data Mining (E), Sampling Theory, Statistical Theory of Innovative Quality Control, Insurance Statistics
2011	Basic Statistics II, Linear Algebra (E), Statistical Math and Practice (E), Applied Probability Theory, Principles of Insurance
2010	Basic Statistics, Basic Mathematics, Information Statistics

EDUCATION - COURSES ATTENDED (SELECTED) (CONT.)

Biology

- 2016 Neuroscience, Seminars of Distinguished Scientists I (E),
Methodologies in Biomedical Sciences (E)
- 2015 Molecular Cell Biology I, Molecular Cell Biology II, Structure and Function of Human Body,
Understanding of Human Diseases, Tumor Biology, Seminar on Articles

* (E): International language class

EMPLOYMENT

Research Scientist (February 2014–Present)

Research Institute for Future Medicine, Samsung Medical Center

Research Scientist (April 2017–April 2019)

Public Big Data, Statistics and Data Center, Samsung Medical Center

Research Scientist (February 2014– February 2017)

Biostatistics, Statistics and Data Center, Samsung Medical Center

RESEARCH INTERESTS

- Prediction modeling in Big data with Missing values
- Statistical analysis in Public health surveillance data; Epidemiology; Study Design
- Clinical Prediction modeling; Statistical Modeling; Model Selection
- Biomedical Big Data Analysis; Biostatistics; Biomedical Statistics

PUBLICATIONS

Papers at Refereed Journals (*Co-first author)

- Park, S., Sun, J. M., Choi, Y. L., Oh, D., Chi, S. A., ... & Ahn, M. J. (2022). Durvalumab and Tremelimumab with Definitive Chemoradiotherapy for Locally Advanced Esophageal Squamous Cell Carcinoma. Accepted to *Cancer*.
- Park, S., Sun, J. M., Choi, Y. L., Oh, D., Kim, H. K., Lee, T., Chi, S. A. ... & Shim, Y. M. (2022). Adjuvant durvalumab for esophageal squamous cell carcinoma after neoadjuvant chemoradiotherapy: a placebo-controlled, randomized, double-blind, phase II study. *ESMO open*, 7(1), 100385.
- Lee, G., Lim, D. H., Chi, S. A., ..., Chung, T. (2021). Incidence and characteristics of intraocular lens dislocation among patients after phacoemulsification: An eight-year, nationwide, population-based study. *Journal of Clinical Medicine*, 10, 3830.

PUBLICATIONS (CONT.)

Papers at Refereed Journals (*Co-first author)

- Lee, G. I., Chi*, S. A., Kim, K., Seo, S. W., Kim, H. J., Chung, T. Y., & Lim, D. H. (2021). Visual impairment increases the risk of dementia, especially in young males in a 12-year longitudinal follow-up study of a national cohort. *Scientific reports*, 11(1), 1-10. *Co-first author
- Lee, G., Lim, D. H., Chi, S. A., ..., & Chung, T. (2020) Risk factors of intraocular lens dislocation after phacoemulsification: A Nationwide Population-Based Cohort Study. *American Journal of Ophthalmology*, 214, 86-96.
- Cho, K. S., Sohn, W., Lee, Y. C., Chi, S. A., Cho, J. Y., Kim, K., & Paik, Y. H. (2020). Use of cyclooxygenase inhibitor and the risk of hepatocellular carcinoma in patients with chronic hepatitis B: A nested case-control study using a nationwide population-based data. *Journal of Viral Hepatitis*, 27(1), 68-73.
- Jung, S. H., Chi, S. A., & Ahn, H. J. (2019). K-Sample comparisons using propensity analysis. *Biometrical Journal*, 61, 698-713.
- Song, B. G., Sinn, D. H., Chi, S., Kim, K., Kang, W., Gwak, G. Y., ... & Paik, S. W. (2018). Additional role of liver stiffness measurement in stratifying residual hepatocellular carcinoma risk predicted by serum biomarkers in chronic hepatitis B patients under antiviral therapy. *European journal of gastroenterology & hepatology*, 30(12), 1447-1452.
- Lee, J. Y., Park, K. A., Oh, S. Y. (2018). Risk of Ischemic Kidney Injury in Patients With Nonarteritic Anterior Ischemic Optic Neuropathy: A Nationwide Population-based Study. *American Journal of Ophthalmology*, 187, 153-157. (Acknowledgement)
- Lee, J. Y., Park, K. A., & Oh, S. Y. (2018). Prevalence and incidence of non-arteritic anterior ischaemic optic neuropathy in South Korea: a nationwide population-based study. *British Journal of Ophthalmology*, 102(7), 936-941.
- Lee, S. Y., Hyun, D., Cho, S. K., Shin, S. W., Jung, S. H., & Chi, S. A. (2018). Iodized Oil Transarterial Chemoembolization and Radiofrequency Ablation for Small Periportal Hepatocellular Carcinoma: Comparison with Nonperiportal Hepatocellular Carcinoma. *Cardiovascular and interventional radiology*, 41(1), 120-129.
- Yang, J. I., Lee, J. K., Ahn, D. G., Park, J. K., Lee, K. H., Lee, K. T., ..., Chi, S. A. & Jung, S. H. (2018). Predictive Model for Neoplastic Potential of Gallbladder Polyp. *Journal of clinical gastroenterology*, 52(3), 273-276.
- Kang, B., Choi, S. Y., Chi, S., Lim, Y., Jeon, T. Y., & Choe, Y. H. (2017). Baseline Wall Thickness Is Lower in Mucosa-Healed Segments 1 Year After Infliximab in Pediatric Crohn Disease Patients. *Journal of pediatric gastroenterology and nutrition*, 64(2), 279-285.
- Lee*, H., Lim*, Y., Chi, S., Min, Y. W., Min, B. H., Lee, J. H., ... & Kim, J. J. (2017). Relationship between obesity and development of erosive reflux disease: A mediation analysis of the role of cardiometabolic risk factors. *Scientific reports*, 7(1), 6375.

PUBLICATIONS (CONT.)

Papers at Refereed Journals (*Co-first author)

- Kim*, H., Kim*, T. H., Choe, J. H., Kim, J. H., Kim, J. S., Oh, Y. L., ..., Chi, S. A., ... & Kim, Y. N. (2017). Patterns of initial recurrence in completely resected papillary thyroid carcinoma. *Thyroid*, 27(7), 908-914.
- Lee*, J. Y., Qing*, X., Xiumin, W., Yali, B., Chi, S., Bak, S. H., ... & Cho, E. K. (2016). Longitudinal monitoring of EGFR mutations in plasma predicts outcomes of NSCLC patients treated with EGFR TKIs: Korean Lung Cancer Consortium (KLCC-12-02). *Oncotarget*, 7(6), 6984.
- Kim, M., Kang, T. W., Kim, Y. K., Kim, S. H., Kwon, W., Ha, S. Y., & Ji, S. A. (2016). Pancreatic neuroendocrine tumour: Correlation of apparent diffusion coefficient or WHO classification with recurrence-free survival. *European journal of radiology*, 85(3), 680-687.
- Do Hee Kim, H. J. K., Ji, S. A., Jang, H. R., Jung, S. H., Kim, J. H., Kim, J. H., ... & Oh, H. Y. (2016). Risk factors for renal impairment revealed after unilateral adrenalectomy in patients with primary aldosteronism. *Medicine*, 95(27), e3930.
- Kang*, S. H., Lim*, Y., Lee, H., Kim, J., Chi, S., Min, Y. W., ... & Rhee, P. L. (2016). A Model for Predicting the Future Risk of Incident Erosive Esophagitis in an Asymptomatic Population Undergoing Regular Check-ups. *Medicine*, 95(4), e2591.

PUBLICATIONS IN PROGRESS

Submitted Papers (*Co-first author)

- Chi, S. A., Lee, H., Lee, J. E., Lee, H., Kim, K., Yeo, I. (2022). An ensemble method based on marginal-effect models (EMM) for estimating usual food intake from single-day dietary data and internal/external two-day dietary data. Submitted to *The American Journal of Clinical Nutrition*
- Shin*, E., Chi*, S. A., Kim, K., Lim, D. H. (2021). The associations of herpes simplex virus and varicella zoster virus infection with dementia. Submitted to *Neurology*
- Park, S., Oh, D., Choi, Y., Chi, S. A., Kim, K., ..., & Sun, J. (2021). Concurrent and consolidative durvalumab and tremelimumab therapy with definitive chemoradiotherapy for locally advanced oesophageal squamous cell carcinoma. Submitted to *The Lancet Oncology*
- Lee, J. Y., Chi*, S. A., Park, K. A., Oh, S. Y. (2020). Risk for vascular dementia in patients with nonarteritic anterior ischemic optic neuropathy. Submitted to *Journal of Neuro-Ophthalmology/ American Journal of Ophthalmology* *Co-first author

PUBLICATIONS IN PROGRESS (CONT.)

Working Papers (*Co-first author)

- Prediction Modeling in Big Data with Missing values (working title). In preparation.
- 2009-2015 년도 심사평가원 자료 이용한 한국인에서 원추각막으로 각막이식을 받는 환자의 위험인자 (working title). In preparation.
- 2009-2015 년도 심사평가원 자료를 이용한 한국인에서 각막이식술 후 치료 (working title). In preparation.
- Shin*, E., Chi*, S. A., Kim, K., Lim, D. H. Prescription of antiviral drug increases the risk of dementia: A 12-year longitudinal follow-up study of a national cohort (working title).

ACADEMIC PRESENTATIONS

- Sohn Won, Kyoung Sun Cho, Jung Hee Kim, Ju-Yeon Cho, Yong Han Paik . PS-116-Use of cyclooxygenase inhibitor and the risk of hepatocellular carcinoma in patients with chronic hepatitis B: A nested case-control study using a nationwide population-based data. Oral presentations: Friday, 12 April 2019. Liver cancer – From Prognosis to locoregional treatments.

POSTERS

- Chi, S. A., Kim, K. Model selection in Big Data with Missing values, Presented at The Korean Society of Health Informatics and Statistics Spring Conference, Seoul National University, South Korea, April 6, 2018.

RESEARCH PROJECTS

- Development and Validation of Prediction Modeling in Big Data with Missing Value (No. 2018R1D1A1B0704842313)
 - Study Period: June 2018– November 2020 (For 30 months)
 - PI: Kyunga Kim (Samsung Medical Center)
- Estimation of Usual Intake with Consideration of Within-Person Variance (No. 17162 식위안 026)
 - Study Period: February 2017–November 2018 (For 22 months)
 - PI: Jung Eun Lee (Seoul National University)
- Development of High Performance Multiplex Diagnostic Technique and Its Clinical Validation for Genomic Biomarkers in Lung Cancer (No. HI16C1984)
 - Study Period: July 2016– April 2019 (For 33 months)
 - PI: Myung-Ju Ahn (Samsung Medical Center)
- Statistical Methods for Innovative Clinical Researches (No. 2015056601)
 - Study Period: November 2015–August 2016 (For 10 months)
 - PI: Sin-Ho Jung (Samsung Medical Center)

RESEARCH EXPERIENCE

Involved in research examining biomedical process for various fields

- Study Period: September 2014–February 2017 (For 3 years and 6 months)
- Number of Projects: 122 (more than 50 per year)
- Fields: 37 fields including Internal Medicine (Gastroenterology, Hematology and Oncology, etc.), General Surgery (Neurosurgery, Gastrointestinal Surgery, etc.), Radiology, Orthopedic Surgery, Anesthesiology and Pain Medicine, Pathology, Pediatrics and Ophthalmology, etc.
- Some of these projects are included in 'Publication' Section.

OTHER PROFESSIONAL EXPERIENCE

Workshop Instructor

- Advanced Clinical Research Design Course, Samsung Medical Center, South Korea (December 2, 2014)
 - Prediction model/ Diagnostic test (Practice)

PROFESSIONAL MEMBERSHIPS AND PROGRAMS

<u>Institution</u>	<u>Position</u>
The Korean Statistical Society	Member
The Korean Society of Health Information and Statistics	Member
Institutional Review Board (Samsung Medical Center)	Researcher
2021 ICH Clinical Statistics Reinforcement Class	Completed

FUNDING AND AWARD

<u>Dates</u>	<u>Title</u>	<u>Institution</u>
March, 2015 ~ February, 2018	Samsung Advanced Institute for Health Sciences Scholarship (For 6 times)	Sungkyunkwan University
July 20, 2012	Economic Finance Workshop Presentation Competition - Runner-up	JA KOREA
February 10, 2011	'Koogle' the Field of Contents for Training - Participation Prize	Konkuk University
July 7, 2010 ~ July 7, 2011	Academic Scholarship - Eui (For 2 times)	Konkuk University

SKILLS

<u>Title</u>	<u>Publisher</u>	<u>Score</u>	<u>Date</u>
Good Clinical Practice	Institutional Review Board (Samsung Medical Center)	Pass	February 13, 2017
TOEIC	YBM	935	January 08, 2022
Rave	Medidata	Pass	April 15, 2016

OTHER ACTIVITIES

<u>Dates</u>	<u>Responsibilities</u>	<u>Field</u>	<u>Institution</u>
2012.03.09 ~ 2012.06.13	The Seoul Donghaeng Project - helping elementary students academically	Voluntary work	The Seoul government, Office of Education and Chang'an District Child Center